UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

October 20, 1995

Mr. Phil Otis
U.S. Department of the Navy
Northern Division - NAVFAC
10 Industrial Highway
Code 1811/PO - Mail Stop 82
Lester, PA 19113-2090

Re: Additional Comments for Phase III Facility-Wide Freshwater/Terrestrial Ecological Risk Assessment (ERA) Report and Site 09 Phase III Remedial Investigation Report, Dated August 25, 1995, Former Naval Construction Battalion Center, Davisville, RI

Dear Mr. Otis:

Please find attached the Environmental Protection Agency's (EPA) aditional comments on the above referenced documents. I look forward to working with you to produce acceptable documents in order to expedite the remedy selection for the Allen Harbor Landfill. We are avaliable to provide you any clarification needed. Please contact me at (617) 573-5736, to set up a meeting to discuss these comments and the ones provided to you in letters dated October 12, 1995 and October 18, 1995.

Sincerely,

Christine A.P. Williams
Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Judy Graham, RIDEM
Lou Fayan, NCBC
Tim Prior, USF&WL
Ken Finkelstein, NOAA
Andy Beliveau, EPA
Bill Brandon, EPA
Jayne Michaud, EPA
Scot Gnewuch, ADL
Nick Lanney, EA

EPA ADDITIONAL COMMENTS ON THE REVISED DRAFT IR PROGRAM SITE 09, PHASE III REMEDIAL INVESTIGATION FOR THE MANAGEMENT OF MIGRATION OPERABLE UNIT REPORT, DATED AUGUST 1995

- Page 2-14, Section 2.1.8

This section does not discuss the results of the QA/QC samples taken as part of this investigation. Was contamination found in the blanks? Did samples have to be blank corrected? Were duplicate (or MS/MSD) results acceptable? Were samples qualified due to poor field or lab QC? This section does only states that samples where taken. Please elaborate and evaluate the QC samples. The section should elaborate on data useability.

- Page 4-3, section 4.5.1.3

The acceptability of the field duplicate data is not discussed in relation to the usability of the field data. If duplicate data is acceptable does it make the field data acceptable? Please elaborate about all the QC data and it relation to data usability.

Acetone appears to be a major player in the soil volatile contamination, but its role in the data evaluation is ignored. Acetone should have either volatilized or biodegraded underground by this time unless there is a large source. Acetone/2-butanone may play a much larger role in solubilizing the other less soluble contaminants. Later in this section ground water contamination is discussed but acetone/2-butanone is not part of that discussion. Somewhere in this document this fact should be discussed.

- Page 4-7, Section 4.6.1

The water quality data cited here for ground water was found in the appendices and in the tables. No data for the Allen Harbor salt water sample was found in Table 4-3, but the salinity is noted on figure 4-7. If the other parameters measured for groundwater were not measured, please state that they were not measured.

- Page 4-11, Section 4.6.2.3

There is no mention of acetone or 2- butanone in the compilation of results even though it is found but is not very high. The acetone/2-butanone concentrations in the corresponding soil samples is quite large. Is there any reason why acetone which is very water soluble not detected in the water samples? Where the samples diluted so much that the acetone was diluted out. Was

there acetone in the blanks and the acetone results are below the action limits determined in the validation of the blanks? It is also possible that the deep well water samples containing very high levels of chlorinated solvents have stratified due to density and the acetone is only found near the upper strata of the well water. It is also possible that the acetone disperses so quickly that it is very dilute compared to the chlorinated solvents. Some explanation of this issue should be included.

- Page 4-12, Section 4.6.2.4

This section attempts to evaluate the representativeness of the samples through correlation analysis. The explanation here is unclear and needs to be further expanded, specifically what data was correlated? The fact that the volatiles do not correlate to the other measurements is the what it should be. This fact is not stated nor explained. The original comment asked what effect the problems with well development had on the usability of the data. The original comment was not addressed.

- Section 5.5.4 & 5.5.5 Mass Flux

No conclusions are drawn from the information given in this section. The fact that volatile analytes are found in the sediments adjacent to the landfill indicates that the mass flux calculations may not be totally valid given that acetone is one of the **major** components found in the sediments close to the landfill(Sites W-1, W-2). Here again acetone crops up as a contaminant that may be the conduit for the other contaminants.

A cross sectional diagram similar to those presented in Figures 3-3, 3-4, and 3-5 depicting the contamination found in the soil or in the waters would be helpful to visualize the contamination in the various layers of strata. The text should also be consistent with the diagrams as to what each layer is named, (i.e.; the grey silt unit should not be the "dark grey silt to clayey silt unit").

These sections should correlate and evaluate the data from the deep core samples in the harbor with the contaminant flux modeled.

- Section 6.2.1.2. Shell Fish Sampling

The Allen Harbor risk assessment should have included the calculation of risks associated with non-depurated shellfish. The overall results may not change since the risks exceed the target risk range. The risk results for depurated shellfish

tissue can be discussed but the Navy needs to explain how the shellfish were depurated in the text (method, duration).

- Page 7-2, para 4

The first sentence is confusing especially the phrase " one or more VOC plumes".

- Section 7, General

This section does not come to a specific conclusion about the need to manage the migration of contaminants from the landfill. With the possibility of contaminants biodegrading, solubilizing, volatilizing, and migrating through many pathways there appears to be a need to prevent the further movement of the contaminants moving toward (into or under) Allen Harbor. There is no discussion whatsoever on this subject. This may be the subject of the Feasibility Study but some mention of the containment option should be put into the conclusions.

- Terrestrial ERA, Section 5.1.4.1

a. BAFs should be derived using only spatially coincident (or within the home range) samples of physical media and corresponding biological tissue. Such as:

vegetation:soil
earthworm:soil
small mammal:soil
All soil samples should have been collocated with the biota samples.

fish:sediment
shell fish:sediment
All sediment samples should have been collocated with the biota.

b. Based on the comparison of tables 5-1 to 5-4 this was not done, please provide rationale for this discrepancy.

c. Also the BAFs in Table 5-4 for vegetation and for the shrew for DDT are not reproducible from the information in tables 5-3. Please explain this discrepancy.

d. All BAFs used in the Terrestrial ERA should be identical to the BAFs in the Marine BAFs. It is difficult to correlate Table 5.4 in the Terrestrial ERA with Figures 6.3.1, 6.3.2 & 6.3.3 from the Marine ERA. Please clarify.